

BL983314

Resistivity Mini Controllers

- Large Clear LCD
- Fire Retardant Casing
- Splash-Resistant Cover



The BL983314 is a simple to operate resistivity controller designed for ultra pure water, reverse osmosis, and water conditioning applications. The BL983314 resistivity controller is also ideal for continuous monitoring of process solutions. Setpoint and calibration are manually adjusted with a trimmer and the alarm relay allows for simple control.

Adjustable Dry Contact Dosing Relay

The BL983314 features a dosing relay that is activated when the reading is below a user programmable set point.

Programmable Overdose Protection

For enhanced safety the mini controller can be programmed to deactivate the dosing relay if the set point is not reached within a specified time interval. The overdosing timer is programmable from 5 to 30 minutes or disabled.

Relay Control Override

With the flick of a switch the mini controller's relay can be disabled (Off), placed in control (Auto), or be activated for manual operation (On) which is useful for priming a dosing pump.

Multicolor LED Indicator

Multicolor LED indicator allows an operator to quickly check the status of the controller. Green = Meter in measurement mode and reading is above the set point. Orange/Yellow = Reading is below the set point and the relay is activated. Blinking Red = Indicates an alarm condition such as when the maximum dosing time has been exceeded.

Fuse Protected Dosing Contacts

The relay dosing contact is rated for up to a 2A load and is fuse protected.

Labeled Termination Connections

Quick-connect terminal blocks are clearly labeled for easy connection to power, conductivity probe and relay that can be used to operate a dosing pump, valve, audible alarm, or light.

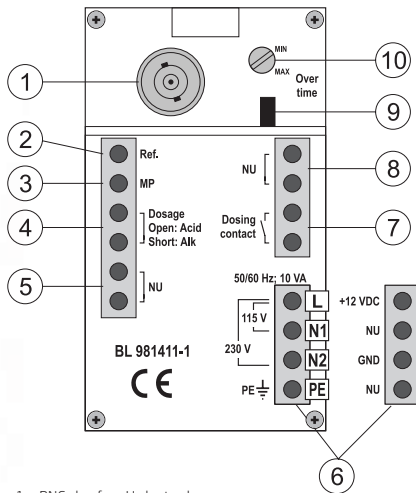
| Specifications | BL983314 |
|--------------------------|--|
| Range | 0.00 to 19.90 MΩ•cm |
| Resolution | 0.10 MΩ•cm |
| Accuracy (@25°C/ 77°F) | ±2% F.S. |
| Temperature Compensation | automatic and linear from 5 to 50°C (41 to 122°F) |
| Temperature Coefficient | β=2.4 ; 3.5 ; 4.5 %/°C selectable through jumper on the rear panel |
| Calibration | factory calibrated |
| Dosing Relay | maximum 2A (fuse protected), 250 Vac, 30 VDC contact closed when measure < setpoint |
| Setpoint | adjustable from 0 to 19.90 MΩ•cm |
| Overtime | adjustable, typically from 5 to approximately 30 minutes |
| Power Supply | BL983314-0: 12 VDC adapter (included) BL983314-1: 115/230 VAC; 50/60Hz |
| Dimensions | 83 x 53 x 99 mm (3.3 x 2.1 x 3.9") |
| Weight | BL983314-0: 200 g (7.1 oz.) BL983314-1: 300 g (10.6 oz.) |
| Ordering Information | BL983314-0 (12 VDC) and BL983314-1 (115/230V) are supplied with mounting brackets, transparent cover and instruction manual. |
| Recommended Probe | HI3314 resistivity probe with 2 m (6.6') cable (included) |

Rear Connections



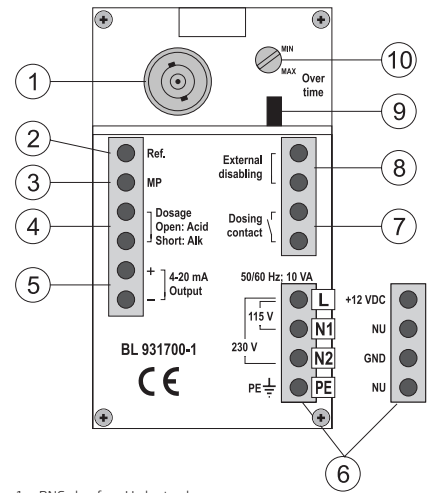
HI981411-1 rear connections example shown

BL981411



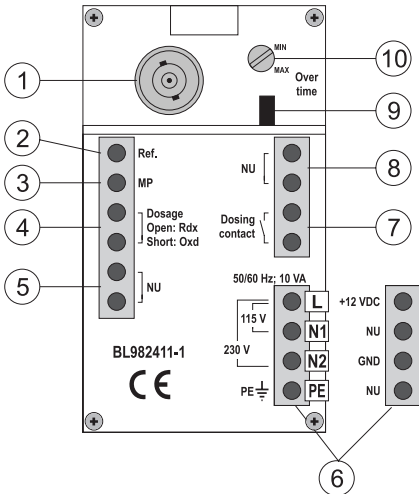
1. BNC plug for pH electrode
2. Connection for electrode reference
3. Connection for potential Matching Pin
4. Acid/Alkaline dosage selection terminal:
 - contact open = acid selection
 - contact closed = alkaline selection
5. Not Used contact
6. Power supply terminal:
 - for BL981411-0 model: 12 Vdc adapter
 - for BL981411-1 model: 115 Vac or 230 Vac option
7. This contact acts as a switch for driving the dosing system (e.g. dosing pump)
8. Not Used contact
9. Jumper for enabling (jumper in) or disabling (jumper removed) the overtime control
10. Trimmer for overtime setting (typically from 5 to 30 minutes)

BL931700



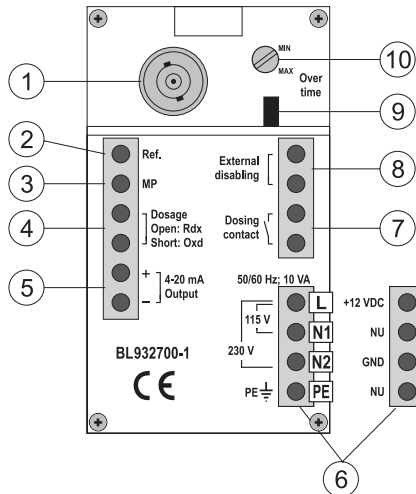
1. BNC plug for pH electrode
2. Connection for electrode reference
3. Connection for potential Matching Pin
4. Acid/Alkaline dosage selection terminal:
 - contact open = acid selection
 - contact closed = alkaline selection
5. 4-20 mA output terminal for recorder connection
6. Power supply terminal:
 - for BL931700-0 model: 12 Vdc adapter
 - for BL931700-1 model: 115 Vac or 230 Vac option
7. This contact acts as a switch for driving the dosing system (e.g. dosing pump)
8. External control and disabling of dosing system
9. Jumper for enabling (jumper in) or disabling (jumper removed) the overtime control
10. Trimmer for overtime setting (typically from 5 to 30 minutes)

BL982411



1. BNC plug for ORP electrode
2. Connection for electrode reference
3. Connection for potential Matching Pin
4. Rdx/Oxd dosage selection terminal:
 - contact open = reductant selection
 - contact closed = oxidant selection
5. Not Used contact
6. Power supply terminal:
 - for BL982411-0 model: 12 Vdc adapter
 - for BL982411-1 model: 115 Vac or 230 Vac option
7. This contact acts as a switch for driving the dosing system (e.g. dosing pump)
8. Not Used contact
9. Jumper for enabling (jumper in) or disabling (jumper removed) the overtime control
10. Trimmer for overtime setting (typically from 5 to 30 minutes)

BL932700

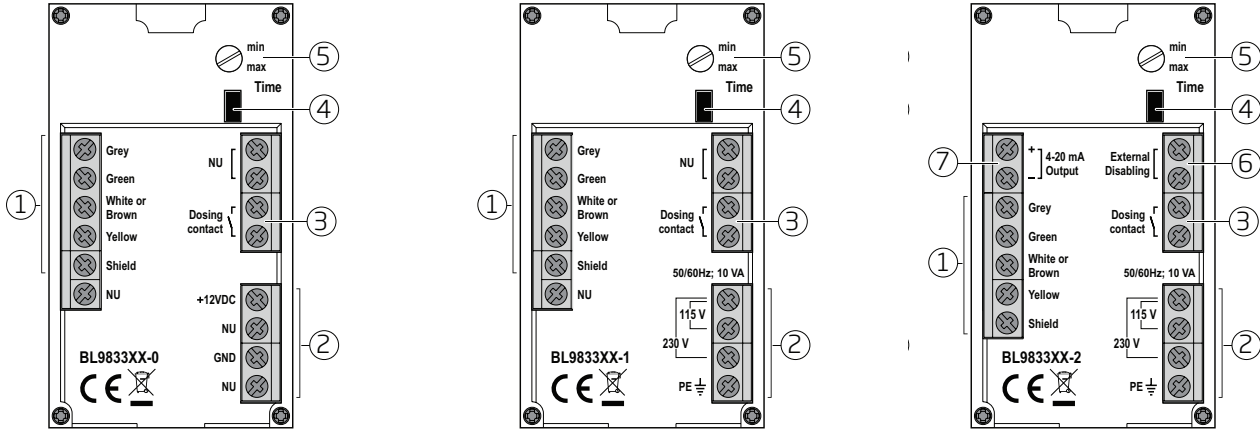


1. BNC plug for ORP electrode
2. Connection for electrode reference
3. Connection for potential Matching Pin
4. Rdx/Oxd dosage selection terminal:
 - contact open = reductant selection
 - contact closed = oxidant selection
5. 4-20 mA output terminal for recorder connection
6. Power supply terminal:
 - for BL932700-0 model: 12 Vdc adapter
 - for BL932700-1 model: 115 Vac or 230 Vac option
7. This contact acts as a switch for driving the dosing system (e.g. dosing pump)
8. External control and disabling of dosing system
9. Jumper for enabling (jumper in) or disabling (jumper removed) the overtime control
10. Trimmer for overtime setting (typically from 5 to 30 minutes)



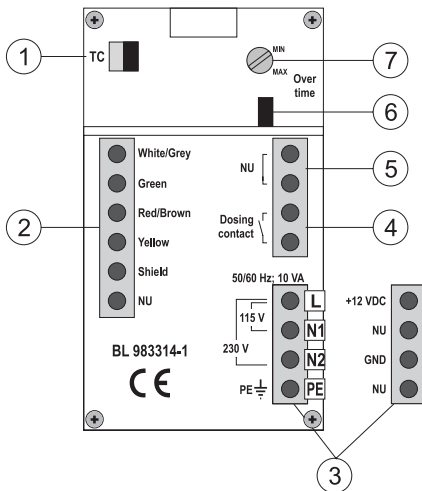
HI983320-1 rear connections example shown

BL983313, BL983315, BL983317, BL983318, BL983319, BL983320,
BL983321, BL983322, , BL983324, BL983327, BL983329



1. Probe connection terminal, low voltage connections
2. Power supply terminal
 - BL9833XX-1 & BL9833XX-2 series, high voltage connections, 115/220 VAC
 - BL9833XX-0 series, low voltage connections, 12 VDC
3. Contact acts as a switch for driving the dosing system
4. External disabling contacts
5. Jumper for enabling (jumper in) or disabling (jumper removed) the overtime control
6. Trimmer for overtime setting (between 5 and 30 minutes)
7. 4-20 mA output contacts
 - BL9833XX-2 series only
 - Follow lead markings +positive / -negative to ensure output leads are correctly wired

BL983314



1. TC jumper for selection of temperature coefficient (β)
2. Connections for HI 3314 resistivity probe
3. Power supply terminal:
 - for BL983314-0 model: 12 Vdc adapter
 - for BL983314-1 model: 115 Vac or 230 Vac option
4. This contact acts as a switch for driving the dosing system (e.g. dosing pump)
5. Not used contact
6. Jumper for enabling (jumper in) or disabling (jumper removed) the overtime control
7. Trimmer for overtime setting (typically from 5 to 30 minutes)